

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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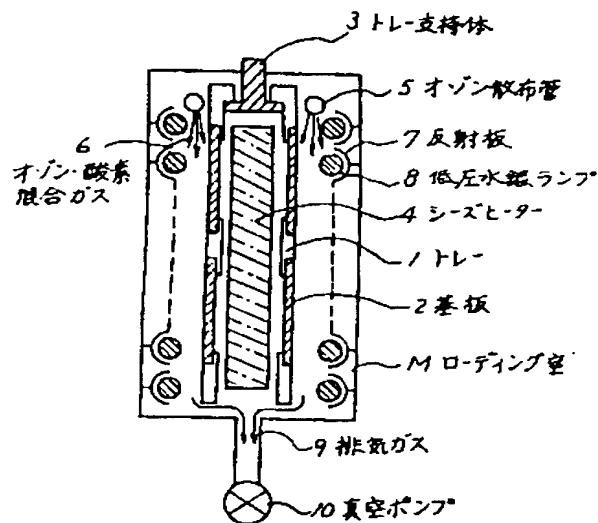
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APPLICANT : NEC CORP;

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TITLE : LOADING CHAMBER FOR FILM  
FORMING DEVICE



ABSTRACT : PURPOSE: To remarkably improve an effect in cleaning the surface of a substrate before a film is formed by making the loading chamber for a film forming chamber evacuable and providing a heating mechanism, UV irradiation mechanism and ozone spraying mechanism in the chamber.

CONSTITUTION: When an amorphous Si film, for example, is formed on the surface of a substrate 2, the substrate is introduced into a loading chamber M to clean its surface, and then the film is formed in a film forming chamber. Two sets of trays 1 carrying the two vertical substrates are provided in the chamber M in parallel, the chamber M is evacuated by a vacuum pump 10, one side of the substrate 2 is heated by a sheathed heater 4 of nichrome wire, etc., the opposite side is irradiated with UV rays from a low-pressure mercury lamp 8 provided with a reflecting plate 7, and the gaseous oxygen 6 contg. ozone is passed over the substrate 2 surface from a spraying pipe 5. Since org. matter, etc., on the substrate 2 surface are oxidized by ozone, directly decomposed by the UV ray, vaporized and removed, the surface is highly cleaned in a short time.

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